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Two New Species of the Genus *Stenus* LATREILLE (Coleoptera, Staphylinidae, Steninae) from Japan

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Abstract This is the 51st taxonomic study on the subfamily Steninae (Coleoptera, Staphylinidae) from Japan, with descriptions of two new species of the genus *Stenus* LATREILLE. The new species of *Stenus* described herein are as follows: *S. uedai* (Tokushima and Kagawa Prefs.) and *S. siphonifer* (Mie and Nara Prefs.). The taxonomically important characters including several posterior abdominal segments, aedeagus, endophallic structures and spermatheca are illustrated in detail.

Key words: Staphylinidae, Stenus, new species, Japan

During the course of my taxonomic studies of Japanese Staphylinidae I discovered two new *Stenus* species from Japan (Honshu and Shikoku); and thus I am to describe and illustrate them in this 51st paper on Japanese Steninae. The holotypes of the new *Stenus* species described herein are deposited in the Natural History Museum and Institute, Chiba (abbreviated as CBM); and the paratypes are in NAOMI Collection.

Stenus uedai NAOMI, sp. nov. [New Japanese name: Ueda-tachige-medaka-hanekakushi]

(Fig. 1A-G)

M a l e and f e m a l e. Brachypterous species; body 6.0–6.3 mm (fore body 2.5–2.7 mm) in length, slender, glossy, with head and abdomen strongly glittering, sparsely covered with thin, suberect setae. Body entirely black; antennae with basal segments clear yellowish brown, apical segments brown to dark brown; labrum black; maxillary palpi and legs yellowish brown to reddish brown. Head with a pair of longitudinal depressions; surface with punctures round, large and setiferous, but the central area between the longitudinal depressions almost impunctate. Antennae very slender, long, with sparse long setae. Pronotum with surface uneven; median longitudinal depression very indistinct in outline; punctures very dense, rough. Elytra with surface weakly uneven; punctures very dense, round, rough. Legs moderately long; tarsi with 4th tarsomeres weakly bilobed. Abdomen weakly narrowed posteriorly; punctures on anterior parts of 3rd and 4th segments large and elliptical, those on posterior parts of 3rd and 4th segments small and sparse, those on posterior segments very small, very sparse. Lateroventrites very narrow, impunctate in 3rd segment; lateroventrites missing and tergoventral sutures missing or extremely thin in 4th to 6th segments.

M a l e. Eighth venter (Fig. 1E) posteromedially with a shallow emargination; 9th tergum (Fig. 1G) with ventral apophyses long, thin; 9th sternum (Fig. 1B) furnished posteriorly with very long setae, very weakly rounded at posterior margin between the apicolateral teeth which are short and pointed; 10th tergum (Fig. 1G) entire, with very long setae. Aedeagal median lobe (Fig. 1C) obtusely an-



Fig. 1. *Stenus uedai* NAOMI, sp. nov. (Unpenji). — A, Spermatheca; B, 9th sternum of male; C, aedeagus of ventral view; D, endophallic basal tube; E, apical part of 8th venter of male; F, apical part of gonocoxite; G, 9th and 10th terga of male. Scale 1: 0.1 mm for A, D, F and 0.2 mm for B–C, G; and scale 2: 0.3 mm for E.

gulate at apicolateral corners, acutely pointed apicomedially; apical sclerotized area with the thin median longitudinal suture. Endophallus with median longitudinal bands (Fig. 1C) fused to form an elongate band, with the dorsally folded band much longer than the ventral part of band which is sclerotized laterally; lateral longitudinal bands (Fig. 1C) thin, about as long as expulsion clasps; expulsion clasps (Fig. 1C) almost cucumber-shaped, connected by a C-shaped string, with a pair of small round-ed sclerites located behind the clasps; basal tube (Fig. 1C, D) slightly asymmetrical, with basal room consisting of two shafts of different length, tube body moderately thick, with apical part slightly swollen left and right. Parameres (Fig. 1C) robust, long, each with one short seta on the mesial side behind the middle; apical part well developed and long, with 24–25 long, straight setae on its mesial margin.

F e m a l e. Eighth venter rounded posteriorly; gonocoxites (Fig. 1F) each with apicolateral tooth pointed, and apicolaterally with a tuft of very long, straight setae; 10th tergum entire, furnished with long and very long setae. Spermatheca (Fig. 1A) without capsule; RT-duct straight; spermathecal duct strongly thick, short with two turns as in Fig. 1A; basal valve with its distal portion sclerotized and its proximal portion very short, submembranous; basal sclerotized duct very short, broadened proximally; basal pouch large, conical and submembranous; spermathecal gland spherical, located on the caudal side of duct near the 2nd turn, densely covered with cilia.

Type series. Holotype (CBM-ZI 151247): ♂, Mt. Unpenji, Ohnohara-chô, Kagawa Pref., 7. VIII.2004, M. YOSHIDA leg. Paratypes: 1 ♂, same data as the holotype; 1 ♂, 1 ♀, Mt. Keisoku, Ni-shi-iyayama, Tokushima Pref., 13.X.2002, K. TANAKA leg.

Distribution. Japan (Shikoku: Tokushima and Kagawa Prefs.).

Remarks. S. uedai sp. nov. belongs to the species group of S. cirrus BENICK, which presently comprises 13 species from Japan (NAOMI & PUTHZ, 2013). S. uedai is allied to S. cirriforms NAOMI, 1988, but it is distinguishable from the latter by the following characters: the lateroventrites missing and tergoventral sutures missing or extremely thin in 4th to 6th segments; the apical part of aedeagal median lobe is triangular, with the apicolateral corner obtusely angulate (Fig. 1C); the apical part of paramere is well developed and long, with 24–25 long setae (Fig. 1C); the endophallic basal tube is moderately thick and slightly asymmetrical (Fig. 1D); and the spermathecal duct is strongly thick and short, with two turns (Fig. 1A).

Etymology. This new species is named in honour of Dr. Kyoichiro UEDA (Kitakyushu Museum and Institute of Natural History), an outstanding systematic lepidopterist and paleontological entomologist in Japan.

Stenus siphonifer NAOMI, sp. nov.

[New Japanese name: Shiwa-kobane-medaka-hanekakushi]

(Fig. 2A-E)

M a l e. Brachypterous species; body 4.8–4.9 mm (fore body 2.3–2.4 mm) in length, elongate, weakly shining. Head black; pronotum, elytra and abdomen dark brown; labrum black; antennae and legs reddish brown. Head with a pair of longitudinal depressions; punctures dense, round, distinct. Pronotum with surface slightly uneven, centrally with a fovea which is indistinct in outline; punctures very dense, rough. Elytra with surface rather uneven, its sutural area more or less elevated; punctures very dense, rough. Legs with 4th tarsomeres moderately bilobed. Abdomen with punctures dense, distinct, and round to elliptical in anterior segments, small, sparse and regular in posterior segments. Lateroventrites atrophied, very narrow and impunctate, each demarcated from tergum by tergoventral



Fig. 2. *Stenus siphonifer* NAOMI, sp. nov. (A, C, E: Ohdai; B, D: Ouchiyama). — A, Ninth and 10th terga of male; B, aedeagus of ventral view; C, 9th sternum of male; D, endophallic expulsion clasps; E, apical part of 8th venter of male. Scale 1: 0.2 mm for B and 0.1 mm for D; and scale 2: 0.2 mm for A, C, E.

suture in 3rd to 6th abdominal segments.

Sixth venter posteromedially with a semicircular flat area; 7th venter medially with a very shallow, elongate-ovoidal depression, the depressed area very shallowly emarginate; 8th venter posteromedially with an arcuate (Fig. 2E) or nearly V-shaped emargination; 9th tergum (Fig. 2A) with ventral apophyses long, thin; 9th sternum (Fig. 2C) with posterior margin arcuate, minutely serrate, apicolateral projections acutely pointed; 10th tergum (Fig. 2A) very shallowly emarginate. Aedeagal median lobe (Fig. 2B) gently rounded at apical and apicolateral parts, without the apicolateral angle nor apicomedian cusp; apical sclerotized area thick, anteromedially with the moderately deep, arcuate emargination. Endophallus with median longitudinal bands (Fig. 2B) moderately short and broad; lateral longitudinal bands (Fig. 2B) well-developed but without small dots on the surface; explusion clasps (Fig. 2B, D) each elongate-triangular in shape, anterior plate demarcated by a transverse suture from posterior plate which is pointed apically; basal tube (Fig. 2B) with basal room not constricted posteriorly, tube body attenuate, very long and slender, connected apically with the elongate, submembranous tube that outthrusts and in situ extends posteriorly beyond the apex of median lobe. Parameres (Fig. 2B) thin, very weakly incurved; apical part short, furnished mesially with 8–9 short setae.

Female. Unknown.

Type series. Holotype (CBM-ZI 151248): ♂, Mt. Minamimata, Ohuchiyama, Mie Pref., 4. XI.1996, K. KANNO leg. Paratype: 1 ♂, Mt. Ohdai, Nara Pref., 31.VII.1958, T. SHIBATA leg.

Distribution. Japan (Honshu: Mie and Nara Prefs.).

Remarks. S. siphonifer sp. nov. belongs to the species group of *S. indubius* SHARP. This new species is closely allied to *S. inimitabilis* PUTHZ, 1993 from Shikoku and Kyushu, but it is distinguishable from the latter by the following characters: the lateroventrites are fused with solidiventrites in 4th to 6th abdominal segments; the apical and apicolateral parts of aedeagal median lobe are gently rounded, without the apicolateral angle nor apicomedian cusp (Fig. 2B); the apical sclerotized area of median lobe is more developed and broader (Fig. 2B); the anterior plates of endophallic expulsion clasps almost turn anteriorly (Fig. 2D); and the parameres are short and do not reach the apex of median lobe (Fig. 2B).

Etymology. The specific epithet of this new species is the Latin adjective "*siphonifer*", that consists of "*sipho*" (which means "tube") + Latin adjective "*-fer*" (from a Latin verb "ferō"); and the endophallic basal tube of this species has the slender duct as in Fig. 2B.

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要 約

直海俊一郎:日本産メダカハネカクシ属(コウチュウ目ハネカクシ科)の2新種の記載. ―― ハネカクシ科メダカハネカクシ属に属する日本産2新種を、以下のとおり記載した. Stenus uedai (和名新称:ウエダ タチゲメダカハネカクシ)は、S. cirrus 種群に属する新種で、香川県および徳島県に分布する. S. siphonifer (和 名新称:シワコバネメダカハネカクシ)は、S. indubius 種群に属する新種で、三重県および奈良県に分布する.

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